Docket No. 2019-365-E

# DIRECT TESTIMONY OF STEVEN J. LEVITAS ON BEHALF OF THE SOUTH CAROLINA SOLAR BUSINESS ALLIANCE

**EXHIBIT SJL-8** 

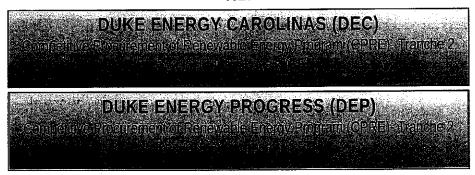
DOCKET NO. E-2, SUB 1159 DOCKET NO. E-7, SUB 1156



# DUKE ENERGY CAROLINAS, LLC DUKE ENERGY PROGRESS, LLC

# FINAL REPORT OF THE INDEPENDENT ADMINISTRATOR

# RE:



# REQUEST FOR PROPOSALS FOR THE COMPETITIVE PROCUREMENT OF RENEWABLE ENERGY PROGRAM TRANCHE 2

February 9, 2021

# ACCION GROUP, LLC

244 North Main Street Concord, New Hampshire 03301 Telephone: 603-229-1644 Fax: 603-225-4923

Email: advisors@acciongroup.com www.acciongroup.com

# **TABLE OF CONTENTS**

TABLE	OF CONTENTS	1
I.	EXECUTIVE SUMMARY	. 1
1.	BACKGROUND	
2.	LESSONS LEARNED FROM TRANCHE 1	
II.	WEBSITE	
111.	OVERVIEW OF TRANCHE 2 CPRE PROPOSAL PROCESS	
ŧV.	PRE-PROPOSAL SUBMISSION ACTIVITIES	6
1.	REGISTRATION	
2. 3.	IA GUIDANCE AND COMMUNICATION	
v.	PROPOSAL SUBMISSION REQUIREMENTS	
VI.	PROPOSAL SUBMISSION STATISTICS	
1.	SUBMITTED PROPOSALSGENERATING CAPACITY	
2. 3.	TRANSMISSION AND DISTRIBUTION	
3. 4.	SUBMISSION BY STATE	
5.	PRICE DECREMENT	
6.	NON-CONFORMING PROPOSALS	
VII.	EVALUATION MODEL	18
1.	OVERVIEW	
2.	REQUIRED INPUT DATA	
VIII.	EVALUATION	
1.	OVERVIEW OF EVALUATION PROCESS	
2.	EVALUATION TEAMS	
3.	PRICE SCORING SHEETS	
4.	CURE PROCESS	
IX.	STEP 1 EVALUATION PROCESS	
X.	STEP 2 EVALUATION PROCESS – T&D OVERVIEW	24
1.	ACTIVITY PRIOR TO PROPOSAL SUBMISSION	24
2.	ANALYSIS REPORT FORMAT	
3.	COMMUNICATION DOCUMENTATION	
4.	ADVANCED STAGE PROJECTS	
5.	INTERCONNECTION VERIFICATION AND VALIDATION	
6.	STEP 2 PROCESS	
7.	THRESHOLD COST ESTIMATES	
8.	MEGAWATT REDUCTIONS AVAILABLE	
9. 10.	COST ANALYSIS COMPLETED	
10. 11.	STEP 2 ADDITIONAL ANALYSIS	
12.	STEP 2 PROCESS CONCLUSIONS	



XI.	SUBJECT MATTER AREAS	32
1.	LEGAL TEAM REVIEW	
2.	PROJECT SUFFICIENCY TEAM REVIEW	33
XII.	ASSET ACQUISITION PROCESS AUDIT	34
1.	OVERVIEW	34
2.	AUDIT OBJECTIVE	35
3.	THE AUDIT	36
4.	DEC/DEP PROPOSAL TEAM EVALUATION METHODOLOGY OVERVIEW	36
5.	ASSESSMENT PROCESS	37
6.	ACQUISITION AUDIT CONCLUSIONS	38
XIII.	FINALISTS	39
XIV.	IA RECOMMENDATIONS	39
ATTA	CHMENT 1—CPRE TRANCHE 2 WINNERS	41
APPE	NDIX A—TRANCHE 2 PROPOSAL SCORING SHEET	42
APPE	NDIX B—SAMPLE BID CONFIRMATION MEMO	4
APPE	NDIX C—CONSTRAINED AREA GUIDANCE	44
APPE	NDIX D—CPRE TRANCHE 2 RFP	4!

# FINAL REPORT OF THE INDEPENDENT ADMINISTRATOR RE: DUKE ENERGY CAROLINAS, LLC; DUKE ENERGY PROGRESS, LLC REQUEST FOR PROPOSALS FOR THE COMPETITIVE PROCUREMENT OF RENEWABLE ENERGY PROGRAM TRANCHE 2

# February 9, 2021

#### i. EXECUTIVE SUMMARY

Accion Group, LLC ("Accion") serves as the Independent Administrator of the Competitive Procurement of Renewable Energy ("CPRE") program for the North Carolina Utility Commission ("Commission" or "NCUC") as applied to Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP" and together with DEC, "Duke"). This is the Independent Administrator's final report concerning Tranche 2 of the CPRE program. This report provides an overview of Tranche 2 with a detailed explanation of the process and procedures that were employed. The Independent Administrator ("IA") also provides recommendations for improvements in Tranche 3. Duke had most recently projected the need for three tranches of CPRE solicitations to be completed within the time frame contemplated by the statute § 62-110.8 but the IA understands that whether Tranche 3 is needed remains an outstanding question to be resolved.¹ Accion began the assignment with the first solicitation ("Tranche 1") in January 2018 and completed the contracting in July 2019. The second solicitation ("Tranche 2") process was launched following the Tranche 1 Final Report in July 2019. The IA participated in all aspects of both programs, starting with working with Stakeholders and Duke in preparing the draft and final Request for Proposal ("RFP") and the Power Purchase Agreement ("PPA"). Figure 1 presents a summary of the Tranche 2 results.

Figure 1

	TRANCHE 2 R	RESULTS	
	)	91:70 °C	រក់សង្គា
MW Procured	589.40	75.00	664.40
Nominal Savings over 20 years	\$98.663 Million		
Average price/MWh	\$36.74	Confidential <sup>3</sup>	Confidential <sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Statute § 62-110.8 states: "Subject to the limitations set forth in subsections (b) and (c) of this section, the electric public utilities shall issue requests for Proposals to procure and shall procure, energy and capacity from renewable energy facilities in the aggregate amount of 2,660 megawatts (MW), and the total amount shall be reasonably allocated over a term of 45 months beginning when the Commission approves the program."

<sup>&</sup>lt;sup>3</sup> Information is considered project-specific and therefore not made public.



<sup>&</sup>lt;sup>2</sup> Through the CPRE process and in this report the abbreviations PPA and RPPA are used synonymously. The contract executed between Duke and an MP is entitled "Renewable Power Purchase Agreement".

Figure 2 summarizes the conforming Proposals received by the IA.

Figure 2

	Number of Proposals	Total MW of Proposals
DEC	34	1,710.40
DEP	6	440.90

As IA, Accion conducted Tranche 2 on a website custom made for the purpose. The IA designed and implemented the evaluation of CPRE Tranche 2 Proposals in order to determine those Proposals which offered the greatest value to the ratepayers and recommend those Proposals for contracting with Duke. The North Carolina Utilities Commission ("NCUC" or "Commission") required the IA to perform the following tasks: <sup>4</sup>

- i. Monitor compliance with CPRE Program requirements.
- ii. Review and comment on draft CPRE Program filings, plans, and other documents.
- iii. Facilitate and monitor permissible communications between the electric public utilities' Evaluation Team and other participants in the CPRE RFP solicitations.
- iv. Develop and publish the CPRE Program methodology that shall ensure equitable review between an electric public utility's DEP/DEC Proposal(s) as addressed in subsection (f)(2)(iv) and Proposals offered by third-party market participants.
- v. Receive and transmit Proposals.
- vi. Independently evaluate the Proposals.
- vii. Monitor post-Proposal negotiations between the electric public utilities' Evaluation Team(s) and participants who submitted winning Proposals.
- viii. Evaluate the electric public utility's DEP/DEC Proposals.
- ix. Provide an independent certification to the Commission in the CPRE Compliance Report that all electric public utility and third-party Proposals were evaluated under the published CPRE Program methodology and that all Proposals were treated equitably through the CPRE RFP Solicitation(s).

This report addresses how Accion completed each task and the results of CPRE Tranche 2.

Tranche 2 applied the lessons learned from Tranche 1 and achieved the MW goals, thus achieving a successful outcome that will benefit consumers and foster development of renewable resources in North Carolina. The IA anticipates future competitive solicitations will further refine the Commission's process with the potential of delivering even greater value to customers.

<sup>&</sup>lt;sup>4</sup> NCUC Docket No. E-100, Sub 150; Rule R8-71(d)(5)



The IA believes the CPRE Tranche 2 solicitation was conducted fairly. All MPs were given access to all information at the same time, the evaluation of Proposals was completed without bias toward or against any qualifying technology or participant, and the separation protocols that isolated Proposals from Duke Company personnel, including the Duke Evaluation Team, was strictly enforced. While the Duke Transmission and Distribution Evaluation Team ("T&D Team") and the Duke credit review personnel <sup>5</sup> received queue numbers by necessity as part of the Step 2 review, the T&D Team did not receive bid price data. The IA is unaware of any other instance where other Duke personnel had access to project-identifying information from Proposals prior to the completion of CPRE Step 2 and the release of data to the Duke Evaluation Team.

#### 1. BACKGROUND

The CPRE program is designed to procure 2,660 MW (subject to adjustment as specified in the statute) <sup>6</sup> of new renewable resources over a 45-month period, provided those purchases are below Duke Energy's respective forecasted avoided cost calculated over a twenty-year term. Projects are to be obtained either through a PPA, or from resources to be owned by Duke. Tranche 2 sought 600 MW of qualifying renewable resources for DEC and 80 MW for DEP. Duke and its affiliates are permitted to participate in the CPRE program with Proposals for projects to be constructed or acquired by Duke to serve the goals of the CPRE program.

The IA provided the web-based platform ("Website") for Proposals submitted to DEC, DEP, and Asset Acquisition ("AA") Proposals. The unregulated affiliate of Duke, Duke Energy Renewables ("DER"), participated in the same manner as other Market Participants ("MPs"). The Website's electronic Proposal Form functioned as designed as the IA received a robust number of Proposals and MWs in each Silo as well as a wide variance of Proposals. Both Silos included facility locations in North Carolina and South Carolina, significant ranges in MW capacity, non-storage and storage facilities, and MPs that submitted single and multiple Proposals.

While MPs had the ability to provide other variances, some fields were submitted uniformly. Tranche 2 accepted all renewable energy resources as identified in G.S. 62-133.8(a)(8),<sup>7</sup> however the IA received Proposals for only PV generation. Similarly, while MPs had the option of interconnecting to the Duke system at a Distribution or Transmission level,<sup>8</sup> all Proposals were submitted for Transmission level service.

<sup>&</sup>lt;sup>8</sup> Projects designed to be 20 MW or smaller could interconnect at distribution level.



<sup>&</sup>lt;sup>5</sup> MPs were required to provide Proposal security if their Proposal was identified as eligible for Step 2 consideration. Each Proposal security, other than cash, was approved by specific Duke personnel and the IA.
<sup>6</sup> In Duke's September 1, 2020 CPRE Program Update, the Companies projected the CPRE target would be reduced from 2,660 MWs to a range of 820 – 1,420 MWs due to higher than projected Transition MWs.

<sup>&</sup>lt;sup>7</sup> Renewable resources eligible to bid were "solar electric, solar thermal, wind, hydropower, geothermal, or ocean current or wave energy resource; a biomass resource, including agricultural waste, animal waste, wood waste, spent pulping liquors, combustible residues, combustible liquids, combustible gases, energy crops, or landfill methane; waste heat derived from a renewable energy resource and used to produce electricity or useful, measurable thermal energy at a retail electric customer's facility; or hydrogen derived from a renewable energy resource." See: RFP at 2

On July 17, 2020, the IA completed the selection process and final status notifications were sent to MPs for each Proposal. At that time, the IA created a separate Website message board for exchanges between the MPs of the Finalist Proposals ("Finalist MPs") and the appropriate Duke Personnel. Also at that time, the same Duke Personnel were given access to the Proposal Books of the Finalist Proposals for review. Attachment 1 sets forth the identity of the winning Proposals.

#### 2. LESSONS LEARNED FROM TRANCHE 1

Tranche 1 provided a learning experience for all participants. Through the stakeholder process, suggestions from the Public Staff, MPs, and Duke personnel were discussed and modifications made. Each change was intended to further the CPRE goals and facilitate participation. In summary, the changes were:

- 1. If the DEP/DEC Proposal Team elect to a sponsor an Asset Acquisition Proposal and such Proposal was moved into Step 2, the third-party Market Participant that submitted the Asset Acquisition Proposal was required to post Proposal Security.
- 2. If a Utility Self-Developed Facility were selected as a winner yet failed to move forward, the amount equal to Proposal Security for Third-Party MPs <sup>9</sup> would "be disallowed from the applicable CPRE Rider recovery."
- 3. MPs were guaranteed 14 days' notice by the IA of their need to post Proposal Security. The IA also committed to notify MPs at least one month before moving a Proposal to the Competitive Tier and agreed to accept draft Proposal Security documents in advance of the deadline to review for compliance. This was intended to assist MPs in meeting the Proposal Security deadline.
- 4. Additionally, Proposal Security would be required from the DER Proposal Team.
- 5. The maximum cost for the "Winners' Fee" was doubled from five hundred thousand to one million dollars.
- A new avoided costs threshold and pricing structure was developed consisting of nine pricing periods to be consistent with Duke's updated avoided cost rates in NCUC Docket E-100, Sub 158.
- 7. The definition of "Advanced Stage" Proposals was clarified to be those that had an executed Interconnection Agreement prior to submission.

# II. WEBSITE

Accion Group provided the RFP Website ("Website") for CPRE Tranche 2 to operate as a secure platform for the solicitation process including bidding, evaluation, and contracting. The Website captured Proposals and all exchanges with MPs and preserved the data for review by the NCUC. All activity on the Website was time and date stamped to ensure a complete history of the Tranche 2 solicitation was captured.

<sup>&</sup>lt;sup>9</sup> For Asset Transfer Plus EPC and BOT Proposals, \$20/kW



The main features of the Website, including the Schedule, Question and Answer feature, Announcements, Documents, Message Board, and Proposal form tool, were also utilized in Tranche 1 and were familiar to those users who participated in that solicitation. Each user was also provided a tutorial for use of the Website, both upon registration and available throughout the solicitation on the IA Website.

# III. OVERVIEW OF TRANCHE 2 CPRE PROPOSAL PROCESS

The CPRE Tranche 2 solicitation was broken into three divisions: DEC, DEP, and Asset Acquisition. This was reflected on the Website where each solicitation had their own site, or "Silo," within the Website. The separate Silos were used so that all data associated with the particular solicitation was self-contained, instead of being co-mingled with unrelated data. The data on each Silo was preserved for future review. The three Silos had identical structures and varied insofar as to accommodate minor differences in the solicitations. The Duke Energy CPRE Tranche 2 RFP solicitation Website was released on July 22, 2019. The IA notified approximately 5,000 individuals of the release, including all participants in Tranche 1.

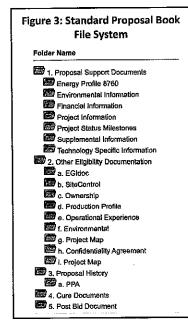
General information regarding the solicitation was made public upon the release of the Website. Certain features were made available to non-registrants, including the solicitation schedule, any announcements made thus far, public documents, and website tutorials in both written and video formats. All other public information was available to registered users on the Silos; this included the Q&A forum and the Messages forum. For registered Market Participants, access was granted to the Proposal Management page following the release of the Proposal form.

The Website performed as the medium for all CPRE related activities. Each Silo automatically saved all user activity tagged with the user information and a time and date stamp. All participants, including members of its evaluation teams, used the Website for all CPRE activities, thereby ensuring a complete record of the solicitation process.

Beginning on August 15, 2019, draft PPA and RFP documents were available to registered users for the purpose of the commenting period. All registered users had access to these documents. Registered users were invited to provide comments on a special "Comments" page. Interested persons, and especially MPs, were invited to review the draft documents and Proposal suggestions that would enable robust Proposals. In effect, interested parties were invited to help draft the RFP documents. The Comments page separated each RFP document into individual sections with the opportunity to provide explicit changes by "red-line" revisions, accompanied by a brief explanation of the intended result. For Tranche 2, redline revisions were made to the Tranche 1 documents.

On October 15, 2019, the Proposal form was released on the Website without the ability for MPs to submit Proposals, pending final Commission action on related matters. The Commission issued a decision establishing the Avoided Cost figures to be employed on January 24, 2020, and the completed Proposal form was available for submission on February 7, 2020. An announcement was made on each Silo, and an automatic email notification was sent informing the MPs of the release. Final Proposals were due on March 9, 2020, over four months after the Proposal form was first available.





When an MP created a Proposal, a corresponding folder was automatically generated within the MP's Proposal Book with five Eligibility Documents, Other subfolders: Proposal Support Documentation, Proposal History, Cure Documents, and Post Bid Document. Proposal Support Documents and Other Eligibility Documentation subfolders served as organized destinations for files uploaded from the Proposal form, Proposal History recorded all activities related to a Proposal, including document uploads, messages submitted on the Message Board, and Proposal Submissions, and saved it as a txt. file. The Cure Documents folder provided a medium for an MP and the IA to share documents during the cure period. The Post Bid Document folder was utilized in the event a Proposal was selected as a winner.

Throughout the process, the IA monitored the Website daily to ensure its functionality, to monitor and respond to all general and project specific questions, and to provide all necessary information to

registered users. The IA achieved this by updating the schedule when appropriate, posting announcements, updating the FAQ's page, and responding to posts on the Q&A page and the Message Board in a timely manner.

# IV. PRE-PROPOSAL SUBMISSION ACTIVITIES

#### 1. REGISTRATION

On July 22, 2019, Accion Group opened registration on the CPRE Tranche 2 Solicitation Website. Registration on the Website remained open throughout the Tranche 2 CPRE process.

Registration was made straightforward and secure. The Registration page was accessed via the homepage of the Website through a tab on the menu bar titled "Register." Upon clicking the tab, users were introduced to the Terms and Conditions put forth by the IA, which they were then required to read and agree with to proceed. Users were then directed to a security page where the Website utilized reCAPTCHA technology to authenticate registrants.

Users were then transferred to the Registration Page, pictured in Figure 4. Registration was a crucial first step in the online solicitation for documentation purposes. Once registered, all user activity on the Website was automatically saved with an individual's identifying data. This provided a complete history of all CPRE related activities which could be tied to individual users.



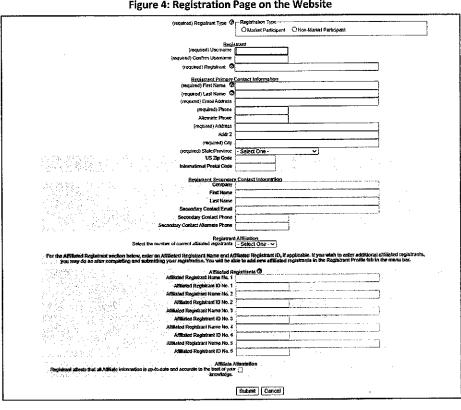


Figure 4: Registration Page on the Website

As highlighted on the top of the Registration Page, users were required to Register as either an MP or a Non-Market Participant ("Non-MP"). Non-MPs had restricted use on the Website compared to MPs. This allowed Non-MPs to have necessary access to understand the progression and process of the CPRE program without participating as a Market Participant. Likewise, MPs had all necessary tools to fully participate in Tranche 2 on the Website. Figure 5 identifies Website access granted to Non-MPs and MPs.

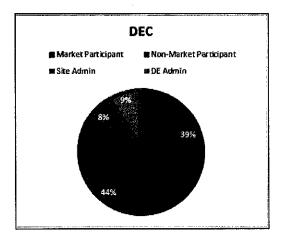
Figure 5: Access to the Website for Non-MP's and MPs. Check marks signify access.

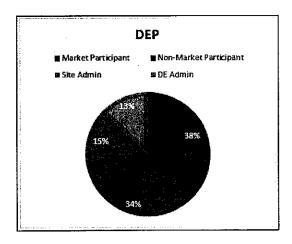
	Non-MPs	MPs
Schedule	✓	✓
Announcements	✓	*
Documents	✓	✓
Viewership to Q&A	<b>✓</b>	Ý
Q&A		4
User Profile	4	✓
Tutorial	1	✓ .
FAQ	<b>✓</b>	✓
Proposal Management		✓



Registration was available throughout the Tranche 2 process. Figure 6 displays the distribution of user types that registered on the Website. Figure 7 represents the number of MPs registered to the Website as of the Proposal Submission deadline on March 9, 2020. Within the DEC Silo, 70 MPs registered from 56 different companies. Within the DEP Silo, 34 MPs registered from 32 different companies. Within the Asset Acquisition Silo, 18 MPs registered from 17 different companies. A list of states and territories represented on the Website is shown in Figure 8.

Figure 6: Registration User Type





The IA believes the dissemination of information about this RFP was extensive and elicited significant interest. Throughout the submission process, the Website received 186 registrants from twenty-five jurisdictions in DEC, and 99 registrants from 21 different jurisdictions in DEP. These figures confirm that there was significant engagement from a wide range of companies.

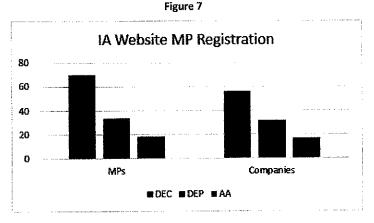


Figure 8: Registration by State/Territory

DEC		
State/Territory	Number of Registrants	
Arizona	1	
Cantonia		
Colorado	1	
galacie con callinativ	3.	
Florida	9	
AND GEORGE	<b>B</b>	
Illinois	5	
audios di <b>riplaise</b> salta	3.1	
Massachusetts	3	
	1	
Missouri	1	
	16	
New Jersey	3	
	3 4 ( <b>2</b> )	
North Carolina	88	
	1	
Oregon	2	
Made mey mail Base		
South Carolina	12	
	, o 6,	
Virginia	5	

DEP	
Chata IT and have	Number of
State/Territory	Registrants
California	3
District Of Columbia	3
Georgia	5
	7
Illinois	2
Maryland	1
New Hampshire	16
	and the state of
North Carolina	43
South Carolina	4
Utah	1
Washington	1

# 2. IA GUIDANCE AND COMMUNICATION

# A. Tutorial and Documents Pages

The IA maintained daily oversight of the Website and provided Website and CPRE guidance. Within the Tutorial page, registrants could access a seven-page written tutorial overviewing the Website navigation, its features, and how to properly complete a Proposal form, as well as a six-minute video walk-through highlighting the same. The IA also utilized the Documents page to post helpful information regarding the CPRE process, including the RFP and RPPA, and Grid Locational Guidance. Before the Proposal submission deadline on March 9, 2020, the IA uploaded more than 90 documents for use by MPs.



# B. Q&A and Messages

For questions or concerns, MPs contacted the IA via the Q&A or Messages pages. The IA created these pages to ensure that reasonable and efficient communications could be completed and documented on the Website. On the infrequent occasions when the IA received phone calls or emails from MPs, the inquirer was immediately directed to continue the correspondence via the Website. When a substantiative inquiry was received outside of the Website, the IA responded via the confidential Message Board and included a copy of the inquiry. This provides the commission with a complete record, even when MPs ignored the directive to communicate via the Website.

The Q&A page and the Message Board were created for distinct purposes. The Q&A page was opened upon the release of the Website on July 22, 2019, and closed at the end of the Submission period, on March 9, 2020. Questions on the Q&A page were non-project specific and could therefore be useful to many Tranche 2 participants. Questions were visible to all users after the IA submitted their response. For

all other questions during this time, MPs were directed to the Message Board. The intended uses of the Q&A page and Message Board were explicitly stated in both the written and video tutorials, and were displayed on their respective pages. After March 9, 2020, the Q&A page was disabled and all communication between the IA and MPs occurred on the Message Board. All posts on the Q&A page remained visible to registered users for the entirety of the Tranche 2 process.

On the DEC Silo, 22 MPs asked a total of 123 questions. Three MPs accounted for over a third (36%) of the total number of questions asked. The average response time was 7.6 days. In DEP, 5 MPs asked a total of 7 questions. Figure 9 displays the response time to each question on the DEC Silo and Figure 10 displays the percentage of the total number of questions asked by MP.

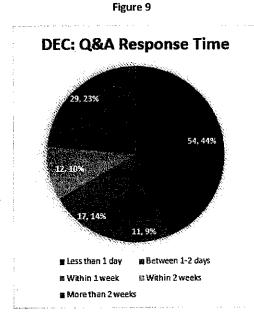
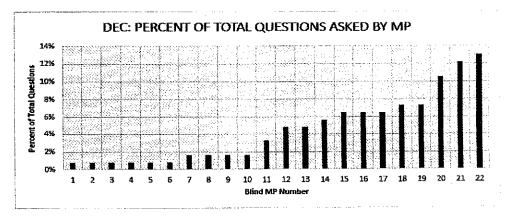


Figure 10



# 3. BIDDER WEBINARS/CONFERENCES

On July 2, 2019 the NCUC issued an order Modifying and Accepting CPRE Program Plan in Docket E-2, Sub 1159. That order required the Duke Companies to meet monthly with interested stakeholders to continue discussions with the IA, the Public Staff, and MPs with the goal of reaching consensus on the documents to be used for Tranche 2 and to provide further information regarding the solicitation process. These meetings were held between August of 2019 and February of 2020.

# A. August 2019 Stakeholder Session

The first of the Tranche 2 Stakeholder Sessions was held on August 7, 2019. Stakeholders were invited to attend in-person at the Duke Energy offices in Raleigh, or online via Webinar. Registration was available via the IA Website and registrants were sent call-in details on August 6, 2019. Additionally, the meeting presentation and Grid Locational Guidance documents were posted on the IA Website in advance of the meeting for review by participants.

A total of eighty-eight (88) individuals from thirty-eight (38) unique and identifiable companies registered to attend the meeting either in-person or via Webinar. The following is a list of topics discussed during the August stakeholder session:

- CPRE Overview
- Tranche 1 Overview
- Tranche 2 Overview and Schedule
- Interconnection
- Grid Locational Guidance
- Storage

# B. September 2019 Stakeholder Session

The second Stakeholder Session and Pre-Bid Conference were held jointly on September 12, 2019. Participants were invited to register and participate in the Webinar by going to the RFP Website, and selecting the "Pre-Bid Webinar" tab on the menu bar. Due to the disruptions caused by Hurricane Dorian, the meeting and Pre-Bid Webinar were offered without an in-person option.

The following announcement was posted on the RFP Website on September 6, 2019 announcing the Pre-Bid Conference:

9/6/2019 10:05:15 AM

The pre-bid conference and Stakeholder Session scheduled for Thursday, September 12, 2019, will be conducted by WEBINAR ONLY. Response to Hurricane Dorian requires Duke conference rooms and personnel be dedicated to storm recovery efforts. This also permits interested persons to participate without having to travel to Raleigh. All persons registered for the webinar will receive access information 24 hours before the event. Please be certain to register for the webinar on the IA Website.

Those persons who registered to participate in-person do not have to re-register because the IA transferred those to the webinar registration.

(Ref.# 9)



Eighty-one (81) individuals registered to attend the Webinar. One hundred four (104) individuals attended <sup>10</sup> the Webinar representing 44 unique and identifiable Companies.

The presentation slides created for the Webinar were posted on the RFP Website prior to the Webinar on September 12, 2019, and a recording of the entire program was posted on the Website following its completion, in order to provide all information for those unable to participate in the Webinar.

During the Webinar Duke and the IA provided background of the solicitation and an overview of the RFP process. The Pre-bid Conference was followed immediately by the Stakeholder Session. The following topics were discussed in their respective Webinars:

# Pre-bid Conference:

- Overview and Background of Tranche 2
- Details of Tranche 2 Solicitation
- Interconnection
- Pro Forma PPA
- Asset Acquisition Proposals

# Stakeholders Session:

- Tranche 1 Debrief
- Pro-forma RFP & PPA
- Status of Avoided Cost
- Storage Protocol Revisions
- Transmission Analysis

Finally, the participants were encouraged to ask questions. The Webinar produced sixty-seven (67) questions, which were answered by Duke Personnel or the IA. All responses from Duke were reviewed by the IA. The questions and written responses were posted on the CPRE Tranche 2 RFP Website on October 10, 2019. Participants were advised that the written responses should be used when preparing Proposals, as the oral response at the Pre-Bid Webinar may have been incomplete.

# C. October 2019 Stakeholder Session

The October Stakeholder Session was held both in-person and via webinar on October 10, 2019. Registration was available via the IA Website and registrants were sent call-in details on October 9, 2019 or in-person meeting room information on October 10, 2019. Individuals who registered after these details were sent were given the information upon registration.

A total of sixty (60) individuals from thirty (30) companies registered to attend either in-person in Raleigh or via webinar. A copy of the meeting slides was posted on the IA Website prior to the stakeholder session, and a recording of the webinar was subsequently posted on the IA Website on October 11, 2019.

<sup>&</sup>lt;sup>10</sup> Registration information was collected from the IA Website. Ultimately more individuals attended via Webinar than registered on the Website; the IA believes this was due to those who had one company representative register for the webinar and then shared the call-in details, thereby accounting for the additional attendees.



The following topics were discussed during the October Stakeholder Session:

- Asset Acquisition Proposals
- Solar Integration Service Charge
- Transmission and Distribution
- Treatment of Projects with Fully Executed Interconnection Agreements
- Tranche 2 online Proposal form

Both during the presentation and at the conclusion of the meeting, participants were encouraged to ask questions. A total of thirty-nine (39) questions were asked during the meeting. These questions and their written responses were subsequently posted on the IA Website, and participants were advised that written responses should be used when preparing their Proposals.

# D. November 2019 Stakeholder Session

The November Stakeholder Session was held both in-person and via webinar on November 13, 2019. Registration was available via the IA Website and registrants were sent call-in details or meeting room information on November 12, 2019. Individuals who registered after these details were sent were given the information upon registration.

A total of sixty-one (61) individuals from thirty (30) companies registered to attend either inperson in Raleigh or via webinar. A copy of the meeting slides was posted on the IA Website prior to the stakeholder session, and a recording of the webinar was subsequently posted on the IA Website on November 14, 2019.

The following topics were discussed during the November Stakeholder Session:

- Solar Integration Service Charge
- South Carolina PSC Decision
- Avoided Cost Rates
- Tranche 2 Schedule
- Proposal Security Notification Process
- December Stakeholder Session

Both during the presentation and at the conclusion of the meeting, participants engaged in discussion with Duke personnel and the IA. A total of fifteen (15) questions were asked during the meeting. These questions and their written responses were subsequently posted on the IA Website, and participants were advised that written responses should be used when preparing their Proposals.

Following the November stakeholder session, there was agreement from Duke, the IA, and stakeholders the next session, originally scheduled to take place in December 2019, should be held only after the NCUC provided a final decision regarding the Avoided Cost figures for Tranche 2. Subsequently, there was a break in the stakeholder sessions until the final meeting on February 6, 2020.

# E. February 2020 Stakeholder Session

The February Stakeholder Session was held both in-person and via webinar on February 6, 2020. Registration was available via the IA Website and registrants were sent meeting location information on



February 4, 2020 or call-in details on February 5, 2020. Individuals who registered after these details were sent were given the information upon registration.

A total of eighty (80) individuals from thirty-eight (38) companies registered to attend either inperson in Raleigh or via webinar. A copy of the meeting slides was posted on the IA Website prior to the stakeholder session, and a recording of the webinar was subsequently posted on the IA Website on February 10, 2020.

The following topics were discussed during the February Stakeholder Session:

- Tranche 2 Amended Schedule
- Avoided Cost Tables
- Solar Integration Charge
- Review of IA Evaluation Process
- RCOD & In-Service Expectations
- T&D Evaluation "Base Case" Determination
- Interconnection Guidance
- Review of Stakeholder Sessions and Points of Consensus

A total of forty-six (46) questions were asked during the meeting. These questions and their written responses were subsequently posted on the IA Website, and participants were advised that written responses should be used when preparing their Proposals. No stakeholder challenged the accuracy of the IA's documentation of the sessions.

# V. PROPOSAL SUBMISSION REQUIREMENTS

#### 1. Proposals Fees

Each MP in this RFP was required to pay a non-refundable "Proposal Fee" with each Proposal submitted based on the facility's nameplate capacity. For PPA Proposals, a minimum fee of five hundred dollars (\$500) per MW with a maximum of ten thousand dollars (\$10,000) was due at the time each Proposal was submitted. For Asset Acquisition Proposals, a non-refundable minimum Proposal Fee of ten thousand dollars (\$10,000) was due for BOT and Joint Venture Proposals.

Proposal Fees were automatically calculated as part of the online Proposal form using the

nameplate capacity entered on each Proposal Form, and instructions for electronic payment were provided both on the Proposal Form, and additionally on the RFP Website documents page. Failure to submit the Proposal Fee would result in automatic disqualification of the Proposal from further consideration.

Figure 11

Proposal Fees Received/Refunded

\$600,000.00
\$500,000.00
\$400,000.00
\$300,000.00
\$200,000.00
\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,000.00
\$\$\$100,0



The IA received and reconciled all Proposal Fees with corresponding Proposals and confirmed that all fees were paid and received no later than 12:00 PM EDT (Noon) on the Proposal due date, as directed by the RFP Documents. The total gross amount of Proposal Fees received was \$570,000. Figure 11 shows the breakdown of fees received for DEC, DEP and AA Proposals submitted, including all refunded Proposal Fees. During the reconciliation process, the IA reached out via the Message Board to one DEC MP who submitted three (3) Proposals that were not eligible per the RFP terms, and one DEC MP who overpaid their Proposal fee. Upon confirmation from both MPs the IA refunded the \$30,000 in Proposal Fees for the ineligible Proposals and returned the \$20,000 overpayment.

Fees were not refunded in the case of any modification of the RFP schedule, rejection of any Proposal, or failure by a winning MP to execute a PPA.

# VI. PROPOSAL SUBMISSION STATISTICS

#### 1. SUBMITTED PROPOSALS

The electronic Proposal form on the Website performed as intended, that is, it simplified the bidding process to a single medium and allowed for a wide variance of Proposals as well as easy submission of similar, but not identical Proposals. Proposals were received through March 9, 2020. Three submitted Proposals did not conform to the CPRE guidelines. This section focuses its analysis on all conforming Proposals that were submitted. In total, 40 conforming Proposals were submitted in DEC and DEP.

In DEC, fifteen MPs submitted at least one Proposal. Over half of the MPs submitted more than one Proposal.

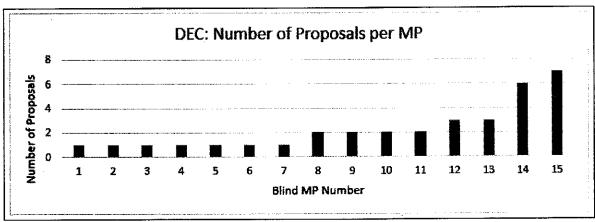
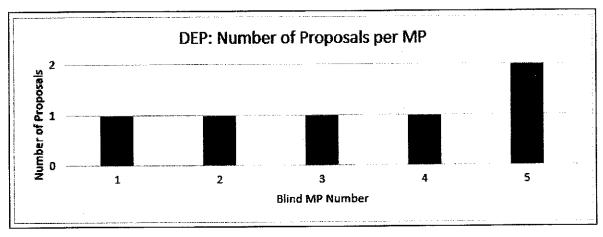


Figure 12

In DEP, five MPs submitted Proposals. One MP submitted more than one Proposal.

Figure 13



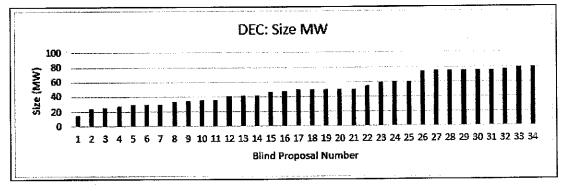
Both DEC and DEP had a robust number of Proposal submissions relative to the procurement target: DEC received 34 Proposals and DEP received six.<sup>11</sup> All Proposals were for solar photovoltaic generation. Three Proposals were submitted with energy storage systems integrated with PV systems in DEC, while one Proposal did the same in DEP. All Proposals sought interconnection at transmission level service.

#### 2. GENERATING CAPACITY

# **Duke Energy Carolina (DEC)**

The IA received Proposals totaling 1,710.4 MW AC of capacity in DEC, which was just under 3 times the targeted 600 MW for CPRE Tranche 2. All Proposals were for solar photovoltaic generation. The minimum Proposal size was 15 MW AC and the maximum was 80 MW. The average Proposal size was 50.3 MW.

Figure 14



<sup>&</sup>lt;sup>11</sup> In most cases a single Proposal would come close to satisfying the requested MW in DEP Tranche 2 (80 MW AC).



# **Duke Energy Progress (DEP)**

The IA received Proposals totaling 440.90 MW in DEP, over 5.5 times the requested amount. The smallest Proposal size was 56 MW and the largest was 80, the maximum amount able to be proposed. The average Proposal size was 73.48 MW.

**DEP: Size MW** 100 Size (MW) 60 40 1 2 3 Blind Proposal Number

Figure 15

#### 3. TRANSMISSION AND DISTRIBUTION

MPs were required to identify the Point of Interconnection ("POI") to which their project would connect, as well as whether the MP desired distribution level or transmission level service. All MPs proposed to interconnect their projects at the transmission level.

# 4. SUBMISSION BY STATE

Pursuant to the CPRE requirements, all proposed facilities for DEC and DEP were required to be located in the respective DEC or DEP service territories in North Carolina or South Carolina. Regarding North Carolina, there were a total of 17 Proposals combining for 886.65 MWs in DEC, and a total of five Proposals combining for 366 MWs in DEP. In South Carolina, there were a total of 17 Proposals combining for 823.7 MWs in DEC, and one Proposal with 74.9 MWs in DEP. This information is depicted in Figure 16.

**Tranche 2 Facility State Submission** South Carolina North Carolina Proposals MWs MWs 823.73 17 886.65 ĐΕ 17 74.90 1 5 366.00 DEF

Figure 16

# 5. PRICE DECREMENT

All Proposals were required to be proposed at a price lower than the Avoided Cost Threshold prices included in the RFP. The price decrement ("Price Decrement," or "Decrement") is defined as the



amount (\$/MWh) below the Avoided Cost Threshold. The average Price Decrement in DEC was \$4.02, and in DEP was \$2.95. Three Proposals were submitted with a zero Decrement.

#### 6. NON-CONFORMING PROPOSALS

After submission, three Proposals were determined to be non-conforming and were not evaluated in Step 1. All three Proposals were from the same MP and had the same non-conformity, that being each had a pre-existing PPA with Duke. The RFP expressly stated that 100% of a Project had to be committed, including "energy, capacity, and environmental and renewable attributes ...." RFP at 2. As clarification, the RFP provided that "for the avoidance of doubt, an MP may not submit a Proposal for a Facility that has an existing off-take agreement." RFP at 2, footnote 4. When submitted, each Proposal stated that the "Facility does not have an existing off-take agreement." Proposal at 1. As part of the due diligence performed by the IA it was determined that each project had an existing PPA, which the MP acknowledged on March 11, 2020, two days after the Proposal submission date. After an initial challenge of the RFP terms, the MP reserved the option to further challenge the RFP provision and ultimately withdrew each Proposal. After repeated requests from the IA, the MP agreed to accept the refund of each Proposal Fee, with the refund completed on July 27, 2020. By order dated October 20, 2020, the Commission concluded that projects with existing PPAs should not be permitted to participate in CPRE.

#### VII. EVALUATION MODEL

# 1. OVERVIEW

Each Proposal was evaluated using the MP's pricing information, the facility's MW AC generating capacity, and the MP's hourly production profile over 20 years ("Loadshape") information. For Proposals that included storage, the facility storage parameters (nominal output, storage duration, and charging rate), and production profiles with and without storage were included in the evaluation.

The IA created a custom evaluation model based on prior experience, industry standards, and the needs of the CPRE program ("Evaluation Model") which utilized the bid input parameters to calculate each Proposal's benefit ("Net Benefit") to the Company system over the twenty-year PPA term. See: Section V of the RFP.

In Step 1, the Proposals were ranked based on the Net Benefit calculation but excluded the T&D system upgrade costs. In the Step 2 process, the T&D system upgrade costs for projects were calculated in an iterative process starting with the most attractive Proposals and then imputed to the Proposal in the final ranking of Proposals.

# 2. REQUIRED INPUT DATA

# 1. Loadshape 8760

For each Proposal, the MP was required to supply a 20-year 8760 Loadshape that best represented the long-term output of the facility. The 8760 Loadshape was subject to review by the Independent Administrator to ascertain that the data within the Loadshape did not exceed the capability of the proposed facility.



A Proposal that included storage was required to submit a pre-storage Loadshape as well as the post-storage Loadshape. The pre-storage Loadshape represented the facility generation with the storage capability turned off. The post-storage Loadshape represented the individual MP's best effort to utilize the facility with its storage capability to maximize facility value (but remain within the practical limits of the energy storage capability). The pre-storage Loadshape was compared to the post-storage Loadshape to evaluate whether the MP exceeded the limits of the Proposal's storage capability in submitting the post-storage Loadshape. The evaluation of a Proposal that included storage was based upon the post-storage 8760 20-year Loadshape data.

A Proposal that did not include storage was required to submit the single 20-year 8760 Loadshape which was used in the evaluation of the facility.

# 2. Facility Pricing

The CPRE program required that each Proposal was priced as a single decrement (i.e., below) the levelized 20-year Avoided Cost Threshold price cap identified in the RFP (see Section IV).

The Proposal form prevented the entry of pricing above Duke's Avoided Costs Threshold as stated in the RFP. The Website Proposal form presented the calculated prices for each pricing period so the MP could confirm the Proposal pricing was as desired.

There was a range of price decrements submitted. The mean price decrement for Proposals submitted in DEC was 4.02 \$/MWh and 2.95 \$/MWh in DEP. The RFP and the Website Proposal form clearly described and presented the pricing periods.

# 3. Other Required Inputs

In addition, evaluation of each facility included the following data:

- a. Maximum AC Capability
- b. Interconnection (Distribution or transmission) Voltage
- c. Storage Capability (if applicable) in MW nominal output
- d. Storage Capacity (if applicable) in Hours duration at the nominal output
- e. Maximum Storage charging rate in MW (if applicable)

The maximum AC capability represented the maximum output from a project as submitted on each 8760. The interconnection voltage was included in the modeling to determine the energy that could flow from the facility.

# VIII. EVALUATION

# 1. OVERVIEW OF EVALUATION PROCESS

The IA strictly followed the evaluation protocol set forth in the Tranche 2 RFP and in NCUC Rule R8-71(f)(3). Further, all appropriate evaluation process information was communicated to MPs in a timely manner. The Announcements, Messages, and Schedule pages were monitored daily to reflect the current Tranche 2 plan, or to remind MPs of an upcoming evaluation deadline.



The major components of the evaluation process are described in depth below. The process was designed to evaluate each Proposal individually while maximizing efficiency and fairness. The IA believes this process succeeded in this goal, and all refinement suggestions for Tranche 3 remain minor and are shown in Section XIV of this report.

#### 2. EVALUATION TEAMS

The IA created five subject matter evaluation teams: Modeling ("Modeling"), Financial ("Financial"), Legal ("Legal"), Transmission & Distribution ("T&D"), and Engineering/Project Sufficiency ("PST"). Each team contained subject matter experts and focused their work on their respective portions of the Proposal evaluation. The Modeling Team designed and created the Evaluation Model and worked to determine the "Price Score" defined on the Scoring Sheet. The Financial Team determined the "Credit Worthiness" for each Proposal by evaluating the MP's financial assurances and credit requirements. The Legal Team focused on three areas: determining that the MP could complete permitting to meet COD, determining that the Proposal had project site control for full term, and determining that the Proposal had site control to the POI for full term. The PST determined scores for four categories: experience of the project team, equipment to be used, required control equipment, and quality of project design. Finally, the T&D Team worked to assist the Modeling Team in determining the Price Score of each Proposal by conducting the T&D analysis of system upgrade costs as described below in Section X.

#### 3. PRICE SCORING SHEETS

In accordance with the Appendix F of the RFP, the Price Scoring Sheet ("Scoring Sheet") was used when reviewing each Proposal. The Scoring Sheets allocated weighted scores to each evaluation category, and category scores were summed to reach a Proposal's overall evaluation score. This method confirmed that each Proposal was evaluated using the same criteria. An example of a Scoring Sheet is attached as Appendix A.

#### 4. CURE PROCESS

After Proposals were submitted, it was necessary to correct any inaccuracies made by MPs, and to gather any further materials requested by the IA's evaluation team to clarify or confirm the MPs intent. This process ("Cure Process") began immediately following the end of the Proposal submission period. All communication during this process was held between the IA and individual MPs via the Message Board and the Proposal's Cure Documents folder. A cure was defined as any alteration or clarification to a Proposal, including the need for additional documents or explanations not explicitly requested for on the Proposal form. The Cure Process confirmed the data inputted on the Proposal Forms for the conforming Proposals to be correct and ready for evaluation.

The Cure Process can be broken down into the following four classifications: The Bid Confirmation Memo, the Cure Process Memos, additional cures notified via Message Board, and the T&D Step 2 Evaluation Cures. The Bid Confirmation Memo ("Confirmation Memo") was sent to MPs on March 10, 2020, one day following the end of the Proposal submission period and contained the most critical information for each Proposal entered by the MPs. This Memo acted as a screening tool for MPs to double-check the information they entered prior to the evaluation process. The MPs had two (2) business days to confirm the information therein. An example Confirmation Memo can be seen in Appendix B. In



response to the Confirmation Memo, the MPs of 13 Proposals identified inaccuracies in their original submission. Additionally, three Proposals were identified as non-conforming and were set aside from evaluation. The Confirmation Memo worked as desired in that it quickly identified any errors to major characteristics of Proposals prior to the evaluation process.

After the Confirmation Memo, each subject matter evaluation team participated in the Cure Process by performing an overview analysis of the data submitted pertaining to their expertise. All questions, clarifications, or errors were noted for each Proposal, then centralized to a memo ("First Cure Process Memo") that was sent to the MP of each Proposal between April 6, 2020 and April 14, 2020. As evaluations deepened, more cures were realized resulting in the need for an additional memo to be sent to appropriate MPs ("Second Cure Process Memo") on April 27. The Cure Process timeline is visualized in Figure 17. Each MP was given a deadline to complete the cures, however, it should be noted that due to complications involving Covid-19, the timetable to complete cures was extended for appropriate situations, causing delays to the evaluation process.

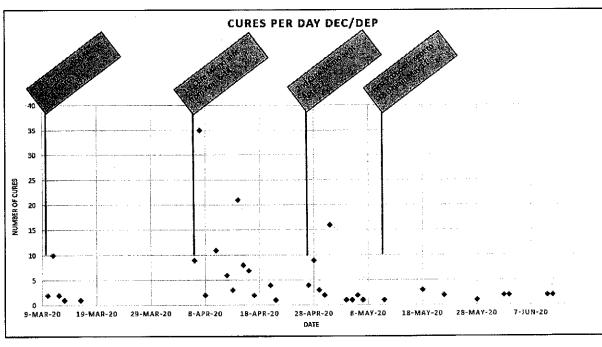
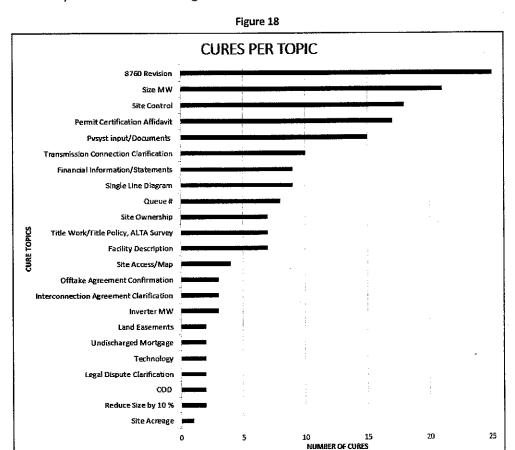


Figure 17

The Cure Process Memos highlighted the need for 125 total cures and were sent to 38 Proposals. The topics and frequency of cures required for each are displayed in Figure 18. The topic requiring the most cures was the generating profile, or 8760 ("8760"). The IA notes that the specific 8760 template required for submission was provided to the MPs on the Documents page of the Website during the Proposal process and that MPs were notified of this in the RFP. The second most frequent cure topic was the megawatt (MW) size of the facility. Most clarifications arose due to the similarities in nomenclature between Nameplate Capacity, Generating Capacity, and Maximum Net Export Capability at POI.



Outside of the Memos, all other cures were communicated directly on the Message Board. In some cases, a phone call was arranged for deeper explanations between MPs and the IA, the substance of which was always noted on the Message Board.



The Cure Process resolved nearly all of the errors in Proposals prior to delving into the more time-consuming and rigorous Step 2 evaluation methods, allowing the T&D team to focus solely on their areas of expertise. From their evaluations, 12 total cures were identified spreading across eight Proposals, 10 of which involved Transmission Connection clarifications.

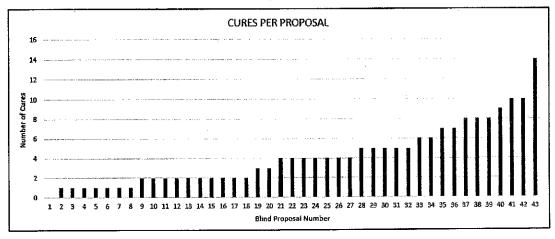
In total, 176 cures were required from 39 Proposals in DEC and DEP. While most Proposals required a cure, the data does not suggest it to be due to confusion on the Website design or the Proposal form content. Only five topics included more than 10 cures, and four of them were pertaining to information on document uploads. Further, over half of Proposals required fewer than five cures.

More importantly, the online platform was designed for error recognition and streamlined error revising — improving the Proposal experience for MPs. The complete Proposal form was a substantial application requiring hundreds of data fields to be entered. To assist MPs, the platform was programmed to reject obvious input errors, such as alphabet characters in numerical fields and numbers outside of realistic ranges. Further, MPs could go back at any time in the Proposal process and adjust data or upload a new document. Mistakes still occurred around the guardrails, however once identified in the evaluation



process, the platform allowed for easy correction. Once given access to the specific cure field, MPs were able to adjust the information and re-submit in a few "clicks."

Figure 19



The IA elected for the more rigorous and structured Cure Process in Tranche 2 as part of the Lessons Learned from Tranche 1. Instead of relying solely on the iterative cure process, where the MP would be notified of each cure on the Message Board as it was discovered, the Memo method concisely highlighted each cure to one centralized document for each Proposal. Further, sending the Memos within the same time span allowed the process to be more unified. This method proved easier for MPs, and while it required a more rigorous approach to the initial evaluations, made the evaluation process smoother for all.

# IX. STEP 1 EVALUATION PROCESS

The Step 1 Evaluation was composed of two goals: first, to rank in order the Net Benefit (\$/MWh) of each Proposal from most attractive to least attractive for ratepayers prior to Step 2 T&D evaluation, and second, to gather a Proposal Security of the most competitive Proposals. The process began once Proposals were confirmed by the Cure Process to be eligible for evaluation. All such Proposals were sent to the Modeling Team who used the Evaluation Model to rank all Proposals based on Net Benefit to ratepayers prior to the Step 2 T&D evaluation of system upgrade costs. The most competitive Proposals, based on the Step 1 Net Benefit ranking, were selected to the Competitive Tier, and given a deadline to submit Proposal Security. The process of selecting Proposals to the Competitive Tier remained iterative to include the most competitive Proposals at any point in time. A Proposal moved into Step 2 T&D Evaluation once it had been selected to the Competitive Tier and provided an acceptable form of Proposal Security.

Proposal Security was required from the MP of all Competitive Tier Proposals prior to advancing to the Step 2 Evaluation. As per the RFP, Proposal Security equaled \$20/kW, based on the facility's inverter nameplate capacity. The Proposal Security was accepted as cash, a Surety Bond, or a Letter of Credit ("LOC"). The IA provided acceptable Surety Bond and LOC forms on the IA Website as part of the



RFP. Once a Proposal was selected to the Competitive Tier, Proposal Security was required within ten days.

As noted previously, the IA exceeded the RFP requirements by providing MPs with advance notice of when Proposal Security might be required. The IA also offered to vet an MP's draft Proposal Security prior to the due date to avoid a Proposal being disqualified for missing the deadline for delivery of a conforming form of Security. This notice occurred on April 14, 2020, which was 14 days before the first notification to MPs of Proposals being in the Competitive Tier. Tranche 2 saw significant improvements in MPs providing acceptable Proposal Security, the timely acceptance of Security by Duke, and in turn, efficiency.

In DEC, the MPs of 12 different Proposals submitted a draft form of Proposal Security before being notified of a deadline. In total, 30 DEC Proposals received selection notifications to the Competitive Tier and the associated 10-day deadline for Proposal Security. Notifications occurred beginning on April 28, 2020 through June 30, 2020, as the IA continued evaluations and attempted to reach the MW goal.

In DEP, the MP of one Proposal submitted a draft form of Proposal Security before being notified the Proposal was in the Competitive Tier. In total, only two DEP Proposals were selected for the Competitive Tier, and both provided Proposal Security.

After Proposal Security was submitted, the IA sent it to the appropriate individuals at Duke for a review of acceptability. If it was found to be unacceptable, Duke would notify the IA of any deficiencies needing cures, who in turn used the Message Board to assist the MP in providing conforming Proposal Security.

# X. STEP 2 EVALUATION PROCESS – T&D OVERVIEW

The goal of the Step 2 evaluation process was to calculate the final Net Benefit (\$/MWh) of each Primary Competitive Tier Proposal. The purpose of this step was for the T&D Team to assign an estimated network upgrade cost to each qualifying Proposal. The purpose of this section of the report is to document the steps taken by the IA and the Duke T&D Evaluation Team to complete the system upgrade cost analysis for each Proposal. This work was completed at the end of July 2020. This discussion is presented as a chronology of events, starting with actions taken prior to Proposal submission. From this process the IA developed recommendations for the T&D evaluators to be employed in Tranche 3.

# 1. ACTIVITY PRIOR TO PROPOSAL SUBMISSION

# i. Transmission Guidance Provided to MPs

The T&D Team created a locational guidance document for MPs to better understand the available transmission capability and assist them in selecting viable points of interconnection. This guidance was adapted from the locational guidance provided for Tranche 1 and represented an expansion of the constraints previously identified. The new constrained areas are included as Appendix C and were provided to the MP's during the Stakeholder sessions. A copy of the materials was available on the Document Page of the IA Website.



Notwithstanding the locational guidance, several MPs proposed non-advanced stage facilities <sup>12</sup> in areas that were identified as constrained. Figure 20 is a map of all DEC Proposals and the pre-identified constrained areas, with winning Proposals identified in green. Note that all winning Proposals were outside of the constrained areas. One successful DEP Proposal will interconnect at transmission level service outside of the constrained area and is shown in Figure 21.

Figure 20

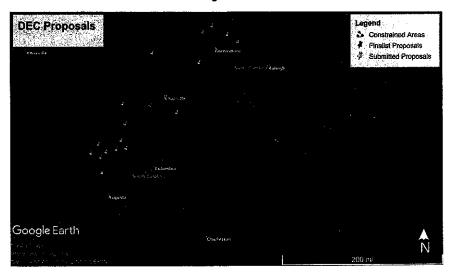
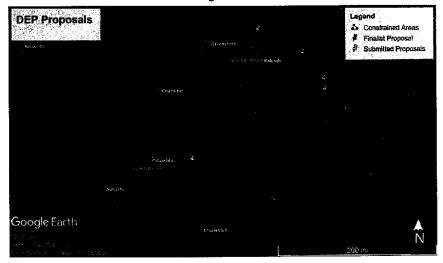


Figure 21



The locational guidance maps were revised in August 2019 in preparation for Tranche 2 using the most current assumptions for the existing system and planned future modifications. Duke T&D personnel maintained that it was not feasible to assess the entire interconnection queue nor would it provide a

<sup>&</sup>lt;sup>12</sup> Advanced Stage projects are those with existing Interconnection Agreements. See: RFP at 18.



realistic picture of the system. <sup>13</sup> Therefore, the grid locational guidance for queued generation was provided based on projects that had been studied (which included Interconnection Requests through October 8, 2018 in DEC and March 31, 2018 in DEP). The maps attempt to communicate geographical areas of the system where it is known that projects will face extended timelines to interconnection or higher costs associated with interconnection based on network upgrades. They were provided as guidance, but were not intended to definitively define the constrained areas. As was determined during Tranche 2, circuits near the areas identified as constrained were similarly constrained, depending on the size of proposed projects and the proposed POI. When that occurred, appropriate upgrade costs were assigned.

#### ii. Distribution Guidance Provided to MPs

MPs were advised that projects smaller than 20 MW would be evaluated as requiring distribution level service. Locational guidance for distribution projects was not differentiated from transmission locational guidance.

# 2. ANALYSIS REPORT FORMAT

As part of the practice of treating each Proposal in a fair and equitable manner, a standard document was used to record and present the analysis results for each Proposal. This draft standard document was successfully utilized in Tranche 1 and was used with minimal modification in Tranche 2.

# 3. COMMUNICATION DOCUMENTATION

After the Proposal submission period closed on March 9, 2020, a "T&D EVAL" folder and confidential Message Board was opened on the DEC Silo of the IA Website for data sharing with the members of the T&D Evaluation Team. Because of the limited number of Proposals for DEP, all T&D Evaluation was documented on this file system on the DEC Silo. This platform ensured that the exchange of files, and the file contents, had a time and date stamp, and that all Proposal data was shared securely. All members of the team shared access to these files, and this process continued until the ranking of the Competitive Tier became final.

One of the process changes instituted for Tranche 2 was that the Account Managers <sup>14</sup> became part of the T&D Evaluation Team. This permitted the Account Managers to assist in the validation and verification of Proposal information.

Beginning on March 9, 2020, all voice or email messages between the IA Evaluation Team members and the T&D Evaluation Team were documented in a communication log with daily postings to the confidential evaluation files on the IA Website. Communication records were organized by week and posted to the "T&D Communication Log" folder on the Evaluation page of the IA Website.

All direct communication from members of the T&D Evaluation Team to MPs concerning CPRE topics was prohibited. Instead, T&D Team members were instructed to provide questions to the IA, who in turn posted them for MPs on the confidential Message Board of the Website. This ensured complete

<sup>&</sup>lt;sup>14</sup> Account Managers have day to day responsibility for working with developers during the interconnection process.



<sup>&</sup>lt;sup>13</sup> This is discussed in the recommendations in this report.

documentation of all exchanges. There were no observed instances of MPs inappropriately approaching T&D Evaluation Team members, or vice versa.

#### 4. ADVANCED STAGE PROJECTS

Advanced Stage projects were recognized in Tranche 2 as a special class of Proposals. To qualify for Advanced Stage status, a project was required to have an executed state or FERC jurisdictional Interconnect agreement as of the date of Proposal submission. A project that obtained Advanced Stage status retained its original queue position and was also responsible for network upgrade costs, if any, whether or not it was selected as a winning project. Advanced Stage status was an advantage for a project with minimal network upgrade costs identified in their existing System Impact Study. For a project already assigned significant network upgrade costs, foregoing Advanced Stage status allowed for re-evaluation of network upgrade costs, including potential sharing of costs in the CPRE pooling process. There was one Advanced Stage project submitted in Tranche 2 and it was awarded a PPA.

#### 5. INTERCONNECTION VERIFICATION AND VALIDATION

The process of verifying and validating the information submitted by the MPs proved to be less arduous than in Tranche 1 when there was confusion about queue identification numbering, whether projects were FERC-jurisdictional, and the precise POI of projects. The IA managed the confirmation process with assistance from Account Managers, T&D Team members, Duke attorneys, and the MPs. Because the identity and location of projects proposed into the CPRE program was to remain unknown to most Duke personnel, including those on the Duke Evaluation Team, information from Proposals was only provided when there was uncertainty about a Proposal, and then only to the Duke personnel with subject-matter expertise to assist the IA so the required separation protocols were maintained. Proposal verification started shortly after the close of bidding in March 2020, and continued into mid-July 2020 Those issues needing verification and validation are discussed below.

# i. Interconnection Request and Project Data Verification

There were several instances where the interconnection request for a project contained a different queue number than was submitted for the project as part of the Proposal. The inclusion of the Account Managers in the evaluation process greatly improved the ease of determination of the correct project data.

The initial cure process was crucial to attaining the basic Proposal transmission data needed for the ranking process. The majority of this work was completed by the end of April 2020, and a few cures remained that were resolved in May.

# ii. Project Size Determination

The CPRE maximum Proposal size for transmission connection was 80 MW; the distribution connection maximum was 20 MW. Project size was established in the interconnection request and could not be expanded, but it could be reduced up to 10 percent.



#### iii. Point of Interconnection Verification

Each bid project was required to specify a point of interconnection within the Duke system. The T&D Evaluation Team and the IA reviewed each Proposal to ascertain that the point of interconnection was appropriate for the project. In some instances, there were questions as to whether the Proposal point of interconnection was proper for the bid projects. During the Step 2 analysis, the IA and Duke T&D Evaluation Team identified a Proposal that included an invalid point of interconnection due to lack of site control. The IA worked with the MP to remedy the situation and allowed the MP to select an alternate POI so that the Proposal could be evaluated in Step 2. All MPs were required to follow Duke System equipment and interconnection standards. In this manner all MPs were treated equally.

#### 6. STEP 2 PROCESS

# i. Transmission Proposals

At the conclusion of Step 1, Proposals were selected by the IA and sent to the T&D Team to begin Step 2 analysis starting on May 11, 2020. In DEC, 13 total Proposals submitted Proposal Security that was accepted by Duke; these were included in the initial Step 2 analysis. In DEP, two (2) Proposals, totaling 155 MW, were sent to the T&D Team on May 13, 2020.

For each Proposal reviewed in Step 2, the information necessary to determine system impact cost was extracted from the Proposal submissions and provided to the T&D Team. The T&D Team reviewed the contents of these files and identified issues for which additional information was needed from the MP. The T&D Team shared requests with the IA via a confidential Message Board on the IA Website and the IA, in turn, interacted with the MP to collect the information and pass it to the T&D Team. This approach ensured that the T&D Team did not to have direct CPRE correspondence with the individual MPs during the evaluation.

# ii. Distribution Service Analysis

There were no distribution Proposals in CPRE Tranche 2.

# 7. THRESHOLD COST ESTIMATES

A review of the location of projects confirmed there were a number in the identified constrained areas where Network Upgrade costs would certainly be incurred. Using the standard transmission upgrade cost estimates prepared by Duke, the IA estimated the maximum Network Upgrade cost each Proposal could bear. For example, if the analysis indicated that a long transmission line upgrade or a significant substation addition would be needed, the network upgrade costs were estimated and compared to the threshold values previously calculated by the IA. This estimate was used to screen for projects that would require extensive and costly system upgrades.

# 8. MEGAWATT REDUCTIONS AVAILABLE

On the Proposal Form, MPs were asked if they would be willing to have their project sizes reduced by up to 10% if interconnection constraints were present, without changing the associated decrement price. This size reduction would not result in a change in the dollar per megawatt hour Proposal price.



Thirty-one (31) MPs expressed their willingness to accept such a reduction if necessary. In the end, it was not necessary to reduce the MW capacity of any of the Proposals in Tranche 2.

# 9. BASE CASE FORMULATION

The base case serves as a foundation for the analysis of the transmission system and represents a snapshot of the electric system as it would exist prior to the addition of the projects included within Tranche 2, considering the existing interconnection queues. The same process was used to evaluate all of the Proposals that were included in the Step 2 analysis. The steps were as follows.

# i. Review all Projects in Serial Queue

Initially included in each base case were all projects with a queue position established prior to the Proposal submission date: March 9, 2020. Any project that bid into CPRE was removed from this initial base case, with the exception of Advanced Stage projects.

#### ii. Overall Base Case Discussion

The T&D Team reviewed and established the base case after receiving the listing of Proposals. The process for confirming the base case required review of all projects in serial queue, elimination of duplicate projects, and elimination of untimely projects.

# iii. Eliminate Duplicate Projects

Some developers held queue positions for the same project with different configurations, such as different project sizing. Where there were multiple projects identified for a single location, including both bid and non-bid projects, only one could be built. In those instances, the IA contacted the MP and established which Project for the site the MP decided to remain in Tranche 2. Using input from the MPs, the IA and the T&D Team eliminated duplicate projects.

#### iv. DEC Base Case

The DEC base case was formulated by excluding all combined cycle plants queued before March 9, 2020 that did not have an executed Interconnection Agreement, and all projects that bid into CPRE that were not Advanced Stage. All remaining queued projects that were not duplicates from the same project were included in the DEC base cases.

Four transmission planning regions exist within DEC. Due to the size of DEC's generation queue, four base cases—corresponding to the four transmission planning regions—were created. The approach of using geographical groupings (based on the existing regional planning responsibilities) to create multiple base cases allowed for a systematic approach to assessing the impact of additional generation in different areas of the system.

#### v. DEP Base Case

The DEP CPRE Tranche 2 Base Case included all non-CPRE queue requests, both FERC and State, with queue dates through March 9, 2020.

Due to the significant amount of solar generation in DEP, impacts from additional generation span the entire DEP region. Thus, all requests in DEP were modeled in a single DEP-wide base case.



#### 10. COST ANALYSIS COMPLETED

The analysis approach used during Tranche 2 was the same one that was used in Tranche 1. The components of the process are included below.

# **Standard Analysis Results Document**

The following topics are included in each Proposal interconnection cost analysis:

- Proposal Information
- Study Purpose
- Study Conclusions
- Interconnection Configuration for the Proposed Proposal
- System Location of Proposed Proposal
- Analysis Structure and Assumptions
- · Transmission or Distribution System Delivery Impacts
- Transmission or Distribution Facilities Estimate Including Upgrade Project Description
- Estimated Cost and Construction Time of Network Improvements

Individual analysis reports were completed for each Proposal that received Step 2 evaluation.

# i. Analysis Results for Each Proposal

The T&D Evaluation Team received the Proposal ranking on May 11, 2020, 63 days after the Proposal closing date. At this point, the analysis of the individual Proposals began. The analysis results were produced and documented using the standard analysis results documentation format.

# ii. Analysis Content

The analysis content was driven by the Proposal analysis document. To help the T&D Team understand and produce the required analysis and documentation of the analysis results, the IA met with the T&D Evaluation Team approximately once a week.

# iii. Analysis Process and Results

# a. Evaluate in Ranked Order

The process for determining costs for each Proposal started with their Step 1 ranked order. Proposals that were highest ranked had the lowest Proposal costs and were eligible for Step 2 evaluation first.

# b. Apply Standard System Planning Models

Both thermal overload and reactive capability analyses were completed using standard Transmission Planning guidelines and models. The results of these analyses were reported in detail in the standard document for each Proposal. Proposal analysis documents were prepared for two DEP Proposals; both Proposals connected at transmission voltage. Proposal analysis documents were completed for DEC Proposals: all were transmission projects.

#### c. Complete Reactive Capability Evaluation

Reactive analysis was part of the Tranche 2 review that was completed for each Proposal in Step 2. As the transmission team was evaluating each project and determining if there was sufficient reactive



capability, it was apparent that reactive power modifications were required for some projects. These project modifications were needed to correct reactive shortcomings and were the responsibility of the MP, thus these changes did not impact the overall transmission Network Upgrade costs for these projects.

# 11. STEP 2 ADDITIONAL ANALYSIS

After the completion of Tranche 1, at the request of the Public Staff, the IA committed to perform a parallel analysis as a sensitivity test with an alternative definition of the base case. The alternative base case was smaller because it eliminated projects using the criteria presented to the NCUC during the May 2019 Technical Session.

The five best ranked Proposals were re-evaluated using the alternative base case analysis. This additional analysis did not alter the outcome of CPRE Tranche 2, but provides useful sensitivities to the impact of alternative analysis of the transmission system impact of Proposals.

The purpose of this additional analysis was to ascertain the extent to which the presence of previously queued projects and the allocation of transmission capacity to these projects impacted the selection of winning projects. Working with the T&D Evaluation Team, the IA formulated a process that addresses this issue. The steps of that process were:

- The identification of five Proposals that could have been selected, but for Network Upgrade cost challenges.
- ii. Then determine the Network Upgrade cost impacts that would have been accrued from "stepping around" the base case projects that would not go forward, using the alternative evaluation approach.
- iii. Determine the minimum resulting Network Upgrade costs for each of the five selected Proposals. Then determine if those Network Upgrade costs exceeded the maximum Network Upgrade cost that each Proposal could bear.

The final step was to identify the revised network upgrade costs for each of the five selected projects and then to contrast these costs to the original network upgrade costs.

Using the additional analysis, it was established that using the alternative approach of the network upgrade costs for several Proposals would have been reduced, but would not have been sufficient to have changed the ranking. All Proposals except one had multiple previously queued Proposals to "step around".

# 12. STEP 2 PROCESS CONCLUSIONS

Based upon the entire body of work that was required to complete the Step 2 network upgrade cost analysis for both transmission Proposals in both DEC and DEP, the following conclusions are offered:

- The analysis process was the same for all Proposals, being evenly and fairly applied to all Proposals.
- The T&D Team successfully utilized the same analysis process in Tranche 2 that was established and validated in Tranche 1.



- All T&D Team members worked well and focused on the tasks required to produce Proposal cost analysis results in a timely manner. This task was made more difficult for Tranche 2 in that the available time for Step 2 analysis was reduced from the 131 days employed in Tranche 1 to 73 days for Tranche 2. Sufficient resources were available to complete the required tasks.
- The centralized Proposal status data tracking that was available to the T&D Evaluation
  Team and to the IA was a valuable improvement in efficiency. The availability of this
  consistent data set greatly improved the availability of the Proposal information and
  allowed all parties to rely upon its accuracy.
- The additional sensitivity analysis that the Duke T&D Team and the IA completed confirmed that approach would not have altered the ranking of Proposals.

#### XI. SUBJECT MATTER AREAS

# 1. LEGAL TEAM REVIEW

Using lessons learned from Tranche 1, the IA's Legal Team performed several tasks for Tranche 2 of the CPRE program. The legal team continued the use of a Site Control Acknowledgement Affidavit. This Affidavit is considered to be particularly helpful as it requires the Market Participant to represent, warrant, and covenant critical site control issues. These include control, site location, adequacy, authority, duration of control, notification of any change, and recognition of the obligation to provide needed site control documentation.

Following the Proposal closure date, the Legal Team reviewed the following types of documentation: Site Deed, Site Lease, Options, Site Control Acknowledgement Affidavit, Title Insurance, Boundary Survey, Description of the Site, Easements, Environmental Studies, Historical Sites Impact, Facility Descriptions, Facility Permits, Other Permits, the Project Map, Project Map with Landmarks, and Sitemaps. Some Market Participants submitted literally dozens of deeds that needed to be reviewed to verify a chain of title and locus. Often numerous option agreements were submitted, some of which had expired and did not extend the necessary term or reflect control of the transmission path to the point of connection.

When documentation was found to be missing or inadequate, a cure of the particular deficiency was requested from the Market Participant. Of the 34 Projects reviewed in DEC, 24 required cures. In the case of DEP, of the 6 Projects, 4 required cures. There was a relatively high number of Projects that were initially missing the Site Control Acknowledgment and complete title information. In some instances, the cure submitted was insufficient and an additional cure was required.

A compilation of this review was organized and submitted to the IA. Based on the Legal Team's review of the various types of documentation, the Proposals were scored by category as follows:

- a. permitting will be complete at the commercial operations date,
- b. project site control for the full term, and
- c. site control to the point of the interconnectivity.



The Legal Team reviewed the above types of documentation again for accuracy and to determine how they scored. A large portion of the Legal Team's time during the scoring process was spent reviewing easements, leases, options, title work, title insurance, and deeds to verify control and that such control coincided with the duration of the project.

# 2. PROJECT SUFFICIENCY TEAM REVIEW

The IA Project Sufficiency Team ("PST") performed a detailed technical evaluation of each Proposal submitted in CPRE Tranche 2 for DEC and DEP. The technical evaluation included a complete review of the experience of the project team, equipment to be used, required control equipment and quality of the project design. The purpose of the technical review was to confirm that any Proposal recommended by the IA for a PPA was technically capable of providing the proposed service within the proposed schedule.

Prior to the receipt of Proposals, the PST had identified which inputs on the Proposal form were pertinent to the technical evaluation and used the IA Evaluation File system to develop a file repository of five "custom reports":

- 1. Generating Facility (technical description of the facility).
- 2. Solar Design (design and equipment specifications), including a review of the PVsyst inputs and outputs underlying the 8760 energy production profiles for selected Proposals.
- 3. Storage Design (design and technical specifications).
- 4. Project Status Summary.
- 5. Proposal Summary.

Examples of documents uploaded to the CPRE website by MP's the PST reviewed included:

- Site Description
- Facility Description
- Inverter Warranty
- Operations (project costs)
- Project Map
- PV On-going Maintenance
- Single Line Drawing
- Site Map
- Site Plan
- Solar Project Design Information including, for selected Proposals, PVsyst documents and calculations
- Spec Sheets for solar panels and inverters
- Storage Spec Sheet
- Storage Experience
- Renewable Facilities Experience

The CPRE Tranche 2 Proposal Forms required each MP of a solar PV project to submit PVsyst modeling information, primarily in the form of document uploads. The following document uploads were required and reviewed by the PST:

PVsyst input and output files used to produce a solar Proposal's 8760 energy production profile.



- .PAN and .OND files utilized in PVsyst evaluations (these files relate to design and performance of PV modules and inverters respectively).
- Related calculations and work papers supporting a solar Proposal's 8760 energy production file.

The PST also conducted detailed PVsyst reviews of selected solar PV and solar PV-plus-storage with respect to information provided by the MP's to confirm that the energy production estimate associated with the hourly production estimate and associated 8760 hourly energy profile was reasonable and consistent with the proposed plant design, equipment and location.

In the initial examination the PST reviewed each Proposal and its associated uploaded documents to determine whether the Proposal was "complete and conforming"; that is, whether the MP provided all of the required information to meet the RFP criteria. In any Proposal where data entries were deficient or the information required clarification, the PST used the Cure Process to provide the MP the opportunity to cure or clarify the information provided. The PST submitted 26 requests for cures to the IA Admin Cure Manager who created, sent and tracked the "cure request" to the relevant MP via the MP's confidential Message Board. Ultimately all of the submitted Proposals were corrected and deemed conforming. No Proposals were eliminated by the PST in the initial review.

Following the preliminary ranking of complete and conforming Proposals, the PST completed its evaluation in the initial tier ranking order. All Proposals were reviewed for sufficiency of the project with a full technical review as they were included in the competitive tier with a comprehensive technical review in the rank order of the Competitive Tier. This approach allowed the best ranked Proposals to proceed to the Step 2 review without delay, and those Proposals drawn from the competitive Tier Reserve to be reviewed sequentially.

The PST completed the relevant sections or subsections of the Sample Scoring Sheet for each of the Proposals. The PST addressed the following subsections: Experience of the Project Team, Equipment to be used, Required Control Equipment, and Quality of Project Design. A complete breakdown of scoring requirements can be found in Appendix F of the RFP, which is also included as Appendix A of this report.

# XII. ASSET ACQUISITION PROCESS AUDIT

# 1. OVERVIEW

The Asset Acquisition ("AA") program was designed for Duke to acquire Renewable Energy Resources consistent with the CPRE requirements to be developed through either (i) a Renewable Resource Asset Transfer ("AT") plus Engineering Procurement and Construction ("EPC") agreement, (ii) a Build, Own Transfer ("BOT") agreement, or (iii) a Renewable Resource Transfer Agreement. MPs could elect to submit Proposals for a PPA to DEC or DEP, and as an Asset Acquisition Proposal conforming to one or more of the AA structures, or the MP could offer projects as both a PPA and an Asset Acquisition Proposal. Thirteen MP Proposals were submitted as AA Proposals in CPRE Transfer 2. There were eight Build, Own Transfer and five Asset Transfer Proposals submitted. One Proposal was submitted as a PPA and as well as an AA Proposal.



As a requirement of the Duke CPRE Tranche 2, the IA is required to perform an audit of the Duke CPRE Asset Acquisition evaluation, assessment, and selection process. The purpose of the audit is to confirm that Proposals selected to be sponsored for acquisition by the Duke DEC/DEP Proposal Team were complete and compliant with the CPRE requirements for eligibility.

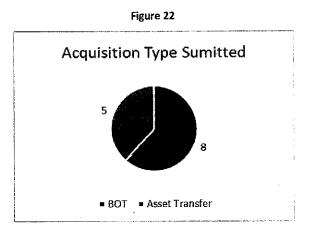
The DEC/DEP Proposal Team utilized the same evaluation, assessment, and selection process that was developed for the CPRE Tranche 1 Asset Acquisition audit. The evaluation process was comprised of two stages. The first stage was a technical (non-economic) evaluation of all Proposals and the second stage was an economic evaluation. If a Proposal did not pass the technical evaluation it was eliminated, and the economic evaluation was not conducted. An economic evaluation was conducted for each Proposal that passed the technical evaluation. If a Proposal failed the economic evaluation it was eliminated and not selected to be sponsored by the DEC/DEP Proposal Team.

The AA Audit focused on the review of the design, execution, and consistent application of the Duke AA evaluation and selection process. The IA review of the DEC/DEP Proposal Team evaluation process included periodic update conference calls with the DEC/DEP Proposal Team as well as utilizing the IA website confidential message board to exchange messages with the DEC/DEP Proposal Team during the evaluation period. The IA also monitored the IA Asset Acquisition website and reviewed the cure requests and information exchanges between the DEC/DEP Proposal Team and the MPs.

Of the thirteen Proposals which were submitted as AA Proposals, seven of the Proposals failed the technical evaluation for a variety of reasons and therefore the stage 2 economic evaluation was not conducted. An economic evaluation was conducted on the remaining six Proposals. The DEC/DEP Proposal Team performed the stage 2 economic evaluation of the six remaining Proposals. That evaluation resulted in a finding of uneconomic pricing above avoided cost, and therefore the DEC/DEP Proposal Team did not elect to sponsor any of the thirteen Proposals.

# 2. AUDIT OBJECTIVE

MPs could elect to submit Proposals for a PPA to DEC or DEP, and as an AA Proposal conforming to one or more of the AA structures, or the MP could offer the project as both seeking a PPA and an AA Proposal. There were eight BOT and five AT Proposals submitted in the CPRE Tranche 2. Figure 22 summarizes the submissions.





#### 3. THE AUDIT

Because there were no Proposals selected by the DEC/DEP Proposal Team for sponsorship, the IA conducted the AA audit for conformity and consistency with the Asset Acquisition Audit process developed in Tranche 1.

As requested, the DEC/DEP Proposal Team provided the following information to the IA:

- Evaluation Methodology Overview: described the process implemented to review, evaluate and rank all AA Proposals received. This included non-economic (technical) and economic evaluation criteria.
- Assessment process summary: rank ordered the thirteen AA Proposals
- Selection process

The IA reviewed the non-economic and economic evaluation criteria used in the evaluation and scoring for each of the thirteen AA Proposals and found them to be the same as the Tranche 1 criteria.

# 4. DEC/DEP PROPOSAL TEAM EVALUATION METHODOLOGY OVERVIEW

The DEC/DEP Proposal Team utilized the same evaluation process that was developed for the Tranche 1 AA audit. This process included a two-stage process that included both a technical (non-economic) evaluation and an economic evaluation with detailed criteria and a point system to score each Proposal. The technical evaluation was used to determine if the Proposal met the development, technical, and quality standards. An economic evaluation was only conducted if the Proposal passed the technical evaluation.

The criteria for the technical (non-economic) evaluation included:

- Status of site control
- ii. Quality of system design (optimal DC/AC ratio, NCF, constructability)
- iii. Design standards/equipment meet DEC/DEP requirements
- iv. Zoning and entitlements/community outreach
- v. Site investigation/environmental studies
- vi. Project schedule MP experience
- vii. Status of interconnection

Each of the non-economic criteria had a ten-point scoring system. A five-point multiplier was added to each score for a total of 400 points. A minimum score of 200 points was required for the non-economic evaluation. If the resulting score was less than 200 points, the Proposal was eliminated, and an economic evaluation of the Proposal was not conducted. If the Proposal's score was greater than 200 points, a detailed economic evaluation was conducted.

The DEC/DEP Proposal team conducted financial modeling using inputs such as project capex, project production estimates, and project operations and maintenance and maintenance costs. The economic evaluation was assigned a maximum point score of 600 points and the Proposals were ranked based on the combined non-economic and economic score of the Proposal. The Proposals for acquisition for BOT or AT were compared side by side. For AT Proposals the DEC/DEP Proposal team estimated the costs to construct the project to the same design criteria provided to all AA MPs. The DEC/DEP Proposal



team considered project risks, including but not limited to, development risks, construction risks, environmental risks, cost risk, and schedule risk. Seven Proposals did not pass the non-economic evaluation and were eliminated.

If a Proposal were to be selected, the selection would be based on the combined economic and non-economic evaluations.

# 5. ASSESSMENT PROCESS

The DEC/DEP Proposal Team created individual Excel spreadsheets to document the evaluation and scoring of each Proposal. DEC received eight Proposals and DEP received five. The Proposals were ranked and scored as follow:

Figure 23

	DEC AA Proposals				
Proposal Ranking	Non- Economic Score	Economic Score	Observations	Disposition	
1 0 i	200	O	Pricing results are above Avolded Cost	Project was not sponsored	
2	200	0	Pricing results are above Avoided Cost	Project was not sponsored	
a	Ä	0	POI is identified as a constrained infrastructure, thus was not advance to step 2 evaluations	Project was not sponsored	
4	200	0	Project is located in constrained area and connects to known constrained line, thus did not advance to step 2 evaluations	Project was not sponsored	
5	190	n/a	Project is located in known constrained county (0/10), Project requires zoning and conditional use approval (0/10)	Project did not pass non-economic criteria	
6	180	n/a	Project requires rezoning (0/10), Project has received no completed IR studies (0/10)	Project did not pass non-economic criteria	
7.	170	n/a	Project has received no completed IR studies (0/10), Project has received no site investigation (0/10), Project requires rezoning (0/10), POI is located in constrained area	Project did not pass non-economic criteria	
8	145	n/a	Project has received no completed IR studies (0/10), Project has received no site investigation (0/10), Project requires rezoning (0/10), POI is located in constrained area	Project did not pass non-economic criteria	



Figure 24

DEP AA Proposals				
Proposal Ranking	Non- Economic Score	Economic Score	Observations	Disposition
1.2	280		Pricing results are above Avoided Cost	Project was not sponsored
2	260	0	Pricing results are above Avoided Cost	Project was not sponsored
3	250	0 i	Pricing results are above Avoided Cost	Project was not sponsored
4	250	0	Pricing results are above Avoided Cost	Project was not sponsored
<b>5</b> //	170	n/a	Project has received no completed IR studies (0/10), Minimal site investigation completed (0/10), Project requires rezoning (0/10)	Project did not pass non-economic criteria

As a result of the evaluation no Proposals were selected to be sponsored and DEC/DEP Proposal Team did not enter into negotiations of any terms and conditions. For each of the Proposals that advanced to the economic evaluation, DEC/DEP Proposal Team engaged each MP to ensure alignment on any term that impacted the economic evaluations such as price, payment terms, and relevant design criteria exceptions. All communications and records with the MPs were exchanged and maintained on the IA Website. Because none of the AA Proposals were selected for sponsorship, DEC/DEP Proposal Team did not negotiate any term sheets or security agreements.

Since the evaluation was completed in two steps, where Proposals were eliminated for failing the non-economic evaluation and only technically viable projects were advanced to the economic evaluation, there was no need to re-rank the Proposals

As stated above none of the six Proposals that passed the technical evaluation passed the stage 2 economic evaluation, as the stage 2 economic evaluation resulted in uneconomic pricing above avoided cost.

# 6. ACQUISITION AUDIT CONCLUSIONS

The DEC/DEP Proposal Team used the same Asset Acquisition evaluation and selection process that was developed in Tranche 1 and applied in Tranche 2. The IA reviewed the conclusions and found the same standards to all Proposals. The Duke AA evaluation methodology is comprehensive and balanced,



and the DEC/DEP Proposal Team criteria are consistent with the CPRE program and technical scoring guidelines. The non-economic criteria for the technical evaluation, including the scoring, meet Duke's specification, standards, and quality for a Company owned asset. The scoring and weighting are consistent with the scoring and weighting used by the IA in evaluating and ranking the PPA Proposals; in both cases the non-economic scoring has a 400-point maximum score and the economic score has a 600-point maximum. The AA evaluation criteria were applied consistently to the thirteen AA Proposals.

# XIII. FINALISTS

Eleven Proposals from DEC and one Proposal from DEP were selected as finalists at the end of Step 2 on July 17, 2020. In DEC, the projects ranged from 25 MW to 75 MW for a total group of selected Proposals totaling 614 MW. In DEP, the finalist Proposal was a 75 MW project. None of those selected Proposals included storage.

The 90-day process after selection was concluded on October 15, 2020. One finalist notified the IA on October 14, 2020 that it would not execute a PPA and would, therefore, forfeit the associated \$500,000 Proposal Security. The MP formally withdrew on October 15, 2020. This withdrawal reduced the total MWs under contract by 25 MWs to 589 total MWs for DEC.

# XIV. IA RECOMMENDATIONS

Every solicitation, even those the IA conducts each year with a number of utilities, produces opportunities for improvement. The CPRE program is no exception. The following are the IA's recommendations for improving the CPRE program, or to be employed for any other competitive solicitation by Duke. At the end of Tranche 1 the IA recommended changes relating to the transmission queue as ways to meet a goal of having so-called "shovel ready" projects move forward. The IA sought to identify projects that were ready for construction, hence the review of the project site and the level of preparedness of the MP. The Step 2 evaluation was intended to identify projects that could use existing transmission resources, so that the cost and lead time of transmission Network Upgrades could be minimal.

The transmission queue includes projects that will not be built, such as when there are multiple queue position reservations from the same project site, when only one project could be constructed. This excess makes it difficult to identify projects submitted into CPRE that could be completed most quickly while minimizing transmission system upgrade costs, because current standards require reserving transmission capacity for some projects that will likely not be completed. The IA understands that the transmission queue issues are the subject of much debate in both North Carolina and South Carolina as well as being addressed in a separate docket before the NCUC to which the IA is not a party. Our recommendations are ways to improve the evaluation process for Tranche 3 by permitting Duke to give priority to projects selected in the CPRE process. Because of the extensive review and evaluation given to CPRE Proposals, Duke and the Commission should have a very high degree of confidence that CPRE selected winners will complete their projects and achieve COD in timely fashion. Adoption of the following

